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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Jamie L. Brewer et al

Serial No.: 10/612,121

Filed: July 2, 2003

Art Unit: 1644

Examiner: Juedes, Amy E.

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**COMPOSITIONS AND METHODS
FOR THE DETECTION OF HUMAN
T CELL RECEPTOR VARIABLE
FAMILY GENE EXPRESSION**

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PRELIMINARY AMENDMENT/RESPONSE

S I R:

In conjunction with the RCE filed May 7, 2006, and in response to the Final Office Action dated December 13, 2006, please reconsider the following application in light of the following comments.

AMENDMENTS TO THE SPECIFICATION

Please add a paragraph [0000] to the specification which reads:

“[0000] The disclosed invention was made with government support under award No. RR164402 from the National Institute of Health. The government has certain rights in this invention.”

No new matter has been introduced by the above amendment.

AMENDMENTS TO THE CLAIMS

Claim 1 (withdrawn): A method of assessing the expression of mRNA for T cell receptor variable subunit α , comprising the steps of:

extracting mRNA from T cells;

performing a polymerase chain reaction using a reaction mixture that includes a

nucleotide sequence selected from the group consisting of SEQ ID NOs: 1 through 32 and said mRNA; and

measuring the product of said polymerase chain reaction.

Claim 2 (withdrawn): The method of Claim 1, wherein said measuring occurs by gel electrophoresis or fluorescent detection.

Claim 3 (withdrawn): The method of Claim 1, wherein said polymerase chain reaction is a reverse transcription polymerase chain reaction.

Claim 4 (withdrawn): The method of Claim 3, wherein a progress of said reverse transcription polymerase chain reaction is assessed in real time.

Claim 5 (withdrawn): The method of Claim 1, wherein said reaction mixture further includes deoxynucleotide triphosphates.

Claim 6 (withdrawn): The method of Claim 6, wherein said reaction mixture further includes SEQ ID No. 56.

Claim 7 (withdrawn): A method of assessing the expression of mRNA for T cell receptor variable subunit β , comprising the steps of:

extracting mRNA from T cells;
performing a polymerase chain reaction using a reaction mixture that includes a
nucleotide sequence selected from the group consisting of SEQ ID NOs: 33 through
55 and said mRNA; and
measuring the product of said polymerase chain reaction.

Claim 8 (withdrawn): The method of Claim 7, wherein said measuring occurs by gel electrophoresis or fluorescent detection.

Claim 9 (withdrawn): The method of Claim 7, wherein said polymerase chain reaction is a reverse transcription polymerase chain reaction.

Claim 10 (withdrawn): The method of Claim 9, wherein the progress of said reverse transcription polymerase chain reaction is assessed in real time.

Claim 11 (withdrawn): The method of Claim 7, wherein said reaction mixture further includes deoxynucleotide triphosphates.

Claim 12 (withdrawn): The method of Claim 11, wherein said reaction mixture further includes SEQ ID No. 57.

Claim 13 (withdrawn): A kit for assessing the expression of T cell receptor variable subunit α in a patient, said kit comprising SEQ ID Nos: 1-32, an enzyme capable of performing a polymerase chain reaction, and buffer solutions capable of supporting said polymerase chain reaction.

Claim 14 (withdrawn): The kit of Claim 13, wherein said kit further comprises deoxynucleotide triphosphates.

Claim 15 (currently amended): A kit for assessing the expression of T cell receptor variable subunit β in a patient, said kit comprising:

SEQ ID Nos: 33-55[[],];

an enzyme capable of performing a polymerase chain reaction[[],]; and

buffer solutions capable of supporting said polymerase chain reaction;

wherein each of SEQ ID Nos: 33-55 consists essentially of the respective specific sequences set forth in Table 2 of the Specification and variations thereof that differ by no more than eight nucleotides.

Claim 16 (original): The kit of Claim 15, wherein said kit further comprises deoxynucleotide triphosphates.

Claim 17 (withdrawn): A gene chip for the measurement of the expression of T cell receptor variable subunit α genes, said gene chip comprising, SEQ ID Nos: 1 through 32.

Claim 18 (withdrawn): A gene chip for the measurement of the expression of T cell receptor variable subunit β genes, said gene chip comprising, SEQ ID Nos: 33 through 55.

Claim 19 (new): The kit of Claim 15;
wherein each of SEQ ID Nos: 33-55 consist essentially of the respective specific sequences set forth in Table 2 of the Specification and variations thereof that differ by no more than two nucleotides.